

AMENDMENTS TO THE CLAIMS:

1-10. [Cancelled]

11. [Currently Amended] A solid oxide fuel cell comprising an electrode layer applied to an electrolyte layer wherein the electrode layer is not contiguous but rather is formed from a plurality of substantially discrete hexagonal elements separated by substantially linear and uniform gaps, such that adjacent hexagons have parallel edges, wherein the gaps take up less than about 2% of the surface area of the electrode.

12. [Currently Amended] A method of applying an electrode layer to an electrolyte layer in a SOFC comprising the steps of:

- (a) providing a screen defining a pattern comprising a plurality of discrete elements;
- (b) screen printing an electrode paste through the screen and onto the electrolyte such that the resulting electrode layer comprises a plurality of discrete elements which are separated by substantially linear, uniform and narrow gaps, such that adjacent polygonal discrete elements have parallel edges;
- (c) sintering the electrode layer.

13. [Currently Amended] The method of claim 12 [[11]] further comprising the step of adding a contact paste layer over the electrode layer.

14. [Currently Amended] The method of claim 12 [[11]] wherein the discrete elements have a regular hexagonal shape and the pattern comprises a honeycomb array of elements.

15. [New] A solid oxide fuel cell comprising an electrode layer applied to an electrolyte layer wherein the electrode layer is discontinuous and comprises a plurality of substantially discrete polygonal elements separated by substantially uniform gaps, wherein adjacent polygonal elements have parallel edges.
16. [New] The solid oxide fuel cell of claim 15 wherein the polygonal discrete elements are hexagonal in shape.
17. [New] The solid oxide fuel cell of claim 17 wherein said hexagons are regular hexagons.
18. [New] The solid oxide fuel cell of claim 15 further comprising a contact paste layer applied to the electrode layer.
19. [New] The solid oxide fuel cell of claim 18 wherein the contact paste layer is a conducting ceramics including lanthanum cobaltate.
20. [New] The solid oxide fuel cell of claim 19 wherein the contact paste layer is not sintered prior to use.
21. [New] The solid oxide fuel cell of claim 15 wherein the gaps take up less than about 5% of the surface area of the electrode.
22. [New] The solid oxide fuel cell of claim 21 wherein the gaps take up less than about 2% of the surface area of the electrode.
23. [New] The solid oxide fuel cell of claim 22 wherein the gaps take up less than about 1% of the surface area of the electrode.